Range Extensions of Trichoptera into Minnesota, with Descriptions of Two New Species¹

DAVID A. ETNIER²

Examinations of additional light trap samples from northern Minnesota have revealed the presence of 30 species of Trichoptera not previously reported from that area by Etnier (1965). Two of these were previously undescribed. Range extensions of many of the other species are as much as 1,000 miles or more.

The samples examined were provided by the University of Minnesota Department of Entomology. All species were identified by the author unless otherwise indicated. Those not illustrated in Ross (1944) are followed by a reference to a recent illustration.

Athripsodes brevis new species

The rounded ventral aspect of the claspers will serve to differentiate this species from the related species *A. alagmus* Ross and *A. tarsi-punctatus* (Vorhies). In *A. brevis* the cerci terminate in a mesal projection well differentiated from the lateral flange of the cerci. In *A. alagmus* and *A. tarsi-punctatus* the cerci taper gradually toward the tip.

Male.—Length 11 mm. Color uniformly light tan, but the entire specimen has been cleared. Male genitalia (Fig. 1) with claspers rather reduced and rounded ventrally. The rounded meso-caudal projection is visible in side view as a pointed and slightly upturned projection. The membranous apical process and the sclerotized mesal process are simple, and less developed than is typical for the genus. Cerci with a rounded mesal extension and broad lateral areas in both dorsal and side views. Tenth tergite and aedeagus similar to those of A. alagmus and A. tarsi-punctatus.

Female.—Unknown.

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² Department of Zoology and Entomology, The University of Tennessee, Knoxville, Tenn. 37916.

Holotype, male.—Garrison ranger station, Crow Wing county, Minnesota, about August 8, 1965. Quentin Stropp.

The holotype has been deposited in the collection of the Illinois Natural History Survey.

Polycentropus milaca new species

While similar to both P. grellus (Milne) and P. glacialis (Ross), the ventral aspect of the meso-dorsal lobe of the clasper is triangular in P. milaca, truncate in P. grellus, and rounded in P. glacialis. The caudal portion on the clasper is truncate in P. milaca. In the two related species the ventro-caudal portion of the clasper is variously produced.

Male.—Length 7.5 mm. The entire specimen has been cleared, but the remaining pigmentation indicates the mottled dark brown color typical of the genus. Male genitalia (Fig. 2) with claspers short and stout. The meso-ventral surface of the clasper projects below the ventral surface in a blunt, rod-shaped prominence. The meso-dorsal projection of the clasper is triangular in ventral view and armed with small teeth along its ventro-caudal surface. A rounded excavation is present on the mesal face of the clasper. The cercus has an indication of a suture about half way between its base and tip, and thus approaches the two-jointed structure present in *P. interruptus* (Banks) and *P. flavus* (Banks). The aedeagus and rod-like tenth tergite are rather typical for the group.

Female.-Unknown.

Holotype, male.—Link Lake ranger station, Itasca County, Minnesota, about July 18, 1965. Robin Nelson.

The holotype has been deposited in the collection of the Illinois Natural History Survey.

New distribution records are listed after the following species. RHYACOPHILIDAE: *Rhyacophila angelita* Banks, Cook county (Ross, 1956).

GLOSSOSOMATIDAE: Agapetus tomus Ross, Pine county (Ross, 1941a).

PHILOPOTAMIDAE: Wormaldia moesta (Banks), Cook county (Dolophilus in Ross, 1944.)

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PSYCHOMYHDAE: Polycentropus melanae (Ross), Hubbard and Itasca counties (Ross, 1938a); P. milaca Etnier, Itasca county (see illustration in this paper); P. weedi Blickle & Morse, specimens previously reported as P. clinei (Milne) by Etnier (1965) have now been assigned to this species (Blickle and Morse, 1955).



FIG. 1. Athripsodes brevis n. sp. A, lateral view of male genitalia; B, dorsal view of cerci and 9th and 10th tergites; C, caudal view of clasper; D, aedeagus, fully extruded. FIG. 2. Polycentropus milaca n. sp. A, lateral view of male genitalia; B, mesal face of clasper; C, ventral view of claspers.

HYDROPTILIDAE: Hydroptila ampoda Ross, Lake and Cook counties (Ross, 1941b); H. berneri Ross, should be removed from the list of Minnesota Trichoptera, the record was based on misidentification of specimens of H. valhalla Denning; H. callia Denning, Itasca county (Denning, 1947); H. delineata Morton, Pine county; H. metoeca Blickle & Morse, Crow Wing county (Blickle and Morse, 1954); H. novicola Blickle & Morse, Lake, St. Louis, and Pine counties (Blickle and Morse, 1954); H. guinola Ross, Lake county (Ross, 1947); H. tortosa Ross, Lake county (Ross, 1938a) [identification by H. H. Ross]; H. waskesia Ross, Crow Wing county; Ochrotrichia spinosa (Ross), Pine and St. Louis counties. Specimens of Oxyethira that are either O. acola Ross or O. anabola Blickle were found in material from Itasca and Hubbard counties but these specimens have not been assigned to either species at this writing (Ross, 1938a; Blickle, 1966); O. forcipata Mosely, Hubbard and St. Louis counties; O. rossi Blickle & Morse: Dr. R. L. Blickle has pointed out in personal communication that O. berneri Etnier is a synonym of this species (Blickle and Morse, 1957); O. zeronia Ross, Lake and Itasca counties [identification by H. H. Ross]; Stactobiella palmata (Ross), Lake county (Tascobia in Ross, 1944).

PHRYGANEIDAE: Banksiola dossuaria (Say), Lake county (Wiggins, 1956) [identification confirmed by G. B. Wiggins].

LIMNEPHILIDAE: Lenarchus keratus (Ross), Cook county (Ross, 1938a); L. pulchellus (Banks), Lake and St. Louis counties (Ross, 1938b); Limnephilus argenteus Banks, Lake county (Ross, 1938b); L. sublunatus Provancher, Itasca county (Ross, 1938b).

MOLANNIDAE: Molanna blenda Sibley, Cook county; M. tryphena Betten, Hubbard and St. Louis counties.

LEPTOCERIDAE: Athripsodes brevis Etnier, Crow Wing county (see illustration in this paper); A. wetzeli Ross, Cook and St. Louis counties (Ross, 1941a); Triaenodes baris Ross, Koochiching county.

SERICOSTOMATIDAE: Sericostoma distinctum (Ulmer), Pine and St. Louis counties (Banks, 1911, as Shizoplex lobata).

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LITERATURE CITED

BANKS, NATHAN. 1911. Trans. American Ent. Soc. 37: 335-360.

BLICKLE, R. L. 1966. Ent. News 77: 185-187.

BLICKLE, R. L., and W. J. MORSE. 1954. Bull. Brooklyn Ent. Soc. 49: 121-127.

-----. 1955. Bull. Brooklyn Ent. Soc. 50: 95-98.

—. 1957. Bull. Brooklyn Ent. Soc. 52: 48-50.

DENNING, DONALD G. 1947. Bull. Brooklyn Ent. Soc. 42: 145-155.

ETNIER, DAVID A. 1965. Ent. News 76: 141-152.

KINGSOLVER, J. M., and H. H. Ross. 1961. Trans. Illinois Acad. Sci. 54: 28-33.

Ross, H. H., 1938a. Bull. Illinois Nat. Hist. Surv. 21: 101-183.

- ——. 1938b. Psyche 45: 1–61.
- -----. 1941a. Trans. American Ent. Soc. 67: 35-126.
- ____. 1941b. Canadian Ent. 73: 15-19.
- —. 1947. Trans. American Ent. Soc. 73: 125-168.

—. 1956. Evolution and classification of the mountain caddisflies. University of Illinois Press, Urbana, 213 p.

WIGGINS, GLENN B. 1956. Royal Ontario Mus. Div. Zool. and Paleontology, Contributions, No. 43: 12 p.

The Entomologist's Record

To encourage the publication of concise and useful new distribution records, corrections of previously published erroneous records, misidentifications, short field notes, and current news items about entomologists, amateur and professional, entomology departments and museums, prompt (monthly) publication is offered in this department

Nomenclatural changes in Oedemeridae (Coleoptera): In order to use the following names, the changes indicated are necessary.

Oxacis bipunctata (Kirsch, 1886), NEW COMBINATION. (= Ananca bipunctata Kirsch, 1886, Berliner Ent. Zeitsch. 30: 338.) An examination of the holotype shows that this species is congeneric with Oxacis and that it is similar to Oxacis bilincata Champion.

Paroxacis dichli (Pic, 1954), NEW COMBINATION. (=Oxacis dichli Pic, 1954, Beitr. Fauna Perus, Jena, 4: 179.) This is one of the few descriptions by Pic that establishes the correct genus, i.e., the claws, according to his description, are toothed at the base, and therefore this species belongs to the genus Paroxacis.